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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/874,414 | 06/05/2001 | Paul R. Simons | GB 000069 | 5626 |

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER

CAO, HUEDUNG X

ART UNIT PAPER NUMBER

2821

DATE MAILED: 05/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/874,414

Applicant(s)

SIMONS, PAUL R.

Examiner

Huedung X Cao

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over BARRUS et al. (6,058,397) in view of KANEKO et al. (4,805,017).

As per claim 1, Barrus teaches "method for generating and coding for transmission an animated graphic image" (Barrus, figure 12), comprising the steps of:

composing a first frame of the image from a plurality of component objects from a predetermined set of object types, the composition including scaling and location of each object within a fixed coordinate set image field (Barrus, column 7, lines 31-51);

coding the first frame as an ordered rendering list of the component objects, the rendering list identifying the order in which the component objects are to be rendered on regeneration of the image (Barrus, column 7, lines 52-55);

It is noted that Barrus does not teach "sequentially coding each subsequent frame (n) as a number of data words representing the difference between that frame (n) and the previous frame (n-1)". However, Kaneko teaches that for the motion picture, such as the animation or television image, the claimed differential coding is well known in the art (Kaneko, column 3, line 67 to column 4, line 56). Thus, it would have been

obvious to a person of ordinary skill in the art at the time the invention was made, in view of the teaching of Kaneko, to configure Barrus' method as claimed because the differential coding between frame-to-frame reduces the dynamic range of data and improves the efficiency of compress the data.

Claim 2 adds into claim 1, wherein the data words coding each subsequent frame (n) identify new component objects to be added or component objects from the previous frame (n-1) to be moved, transformed or removed which Barrus does not teach. However, Kameko teaches that such data words of the differential code is a property of differential code (Kameko, column 4, lines 29-35).

Claim 3 adds into claim 1, further comprising "the step of defining a shape as a plurality of component objects, wherein the definition of the shape is transmitted with the animated graphic image and wherein references to the shape in the animated graphic image are replaced with the component objects when generated" which would have been obvious in view of Barrus' rendering list (e.g., Barrus, figure 11) because all the shapes defined in the rendering list will be transmitted together and replaced by its components when re-generated (Barrus, column 13, lines 5-14) to improve the efficiency of rendering list coding.

Claim 4 adds into claim 1, further comprising the step of defining an object shape in a bit map for at least one component object in the composed frame which Barrus teaches in column 8, lines 43-55 (e.g., bit-map texture data).

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Claim 5 adds into claim 1, wherein the data words include selected ones of place object, place shape, move absolute, move relative, resize and remove (Barrus, column 7, lines 6-10).

Claim 6 adds into claim 1, wherein the data words specify a motion vector identifying a movement pattern for a respective object from which the object position in a subsequent frame may be determined which would have been obvious in view of Barrus' animation information (e.g., figure 12, animated cloud - column 12, lines 52-56) because the animation pattern containing a motion vector improves the efficiency of coding the animated objects and reduces the required memory to store the animated motions.

Claim 7 adds into claim 1, a portable communications apparatus configured to receive and decode animated graphics images generated and coded, the apparatus comprising: a display device coupled with a display driver system arranged to format images for display; a processor arranged to reconstruct the coded image; a receiver coupled with said display driver, being configured to receive the coded image data and pass it to the processor; first storage means containing said object and animation identifier codes, and second storage means for storing reconstructed image frames; wherein the processor is arranged to reconstruct individual frames of the animation by identifying and reconstructing objects from object identifier codes and by applying animation transforms to objects from previous frames in dependence on animation codes which Barrus does not teach. However, Kameko teaches that such differential decoder is obvious for reconstructing the information coded during the coding stage

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(Kameko, column 10, lines 9-28). Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made, in view of the teaching of Kaneko, to configure Barrus' method as claimed because the differential decoding process is needed to rebuild frame-to-frame the differential-coded original data and improves the efficiency of encoding/decoding process.

Claim 8 adds into claim 7, wherein the display driver system includes the processor, the first storage means and the second storage means (Barrus, figure 2; hardware 38, memories for 3D objects, access records,).

Claim 9 adds into claim 7, wherein the display driver system is a vector graphics system which would be obvious in view of Barrus' 3D virtual environmental system because the vector graphic system enhances the speed and efficiency of the 3D object processing.

Due to new ground of the rejection cited above, this action has been made NON-FINAL.

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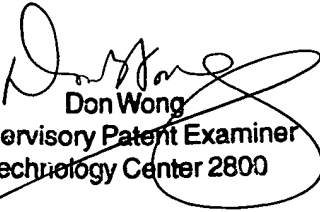
Inquires

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huedung Cao whose telephone number is (571) 272-1939.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong, can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Huedung Cao
Patent Examiner


Don Wong
Supervisory Patent Examiner
Technology Center 2800